

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1 (original). A method of assaying a plant for imidazolinone herbicide resistance conferred by the combination of a PM1 mutation of a *B. napus AHAS1* gene and a PM2 mutation of a *B. napus AHAS3* gene, the method comprising the steps of:

- a) isolating genomic DNA from the plant;
- b) determining the presence or absence of the PM1 mutation in the DNA; and
- c) determining the presence or absence of the PM2 mutation in the DNA,

wherein the presence of the PM1 mutation and the PM2 mutation is indicative of commercially relevant imidazolinone tolerance in the plant.

2 (original). The method of claim 1, wherein the plant is a *Brassica* species.

3 (original). The method of claim 2, wherein the *Brassica* species is selected from the group consisting of *B. napus*, *B. campestris/rapa*, and *B. juncea*.

4 (original). The method of claim 1, further comprising the step of amplifying the isolated DNA prior to determining the presence or absence of the PM1 and PM2 mutations.

5 (original). The method of claim 1, wherein the determining steps are performed using a primer extension-based single nucleotide polymorphism detection method.

Claims 6-11 (cancelled).

12 (new). The method of claim 5, wherein the single nucleotide polymorphism detection method employs a PM1 extension primer comprising a PM1 oligonucleotide selected from the group consisting of an oligonucleotide having a sequence as set forth in nucleotides 1 to 20 of SEQ ID NO:24 and an oligonucleotide having a sequence as set forth in nucleotides 1 to 20 of SEQ ID NO:25.

13 (new). The method of claim 5, wherein the single nucleotide polymorphism detection method employs a PM2 extension primer comprising a PM2 oligonucleotide selected from the group consisting of an oligonucleotide having a sequence as set forth in nucleotides 1 to 20 of SEQ ID NO:66, an oligonucleotide having a sequence as set forth in nucleotides 1 to 20 of SEQ ID NO:67, and an oligonucleotide having a sequence as set forth in nucleotides 1 to 20 of SEQ ID NO:68.